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APPLICATION NO.	FILING DATE.	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,367

10/22/2003

Michael A. McCabe

2002-IP-008009U1

1396

7590 02/20/2007
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EXAMINER

BUTTNER, DAVID J

ART UNIT

PAPER NUMBER

1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/691,367

Applicant(s)

MCCABE ET AL.

Examiner

David Buttner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24,25,27,28 and 31-52 is/are pending in the application.
- 4a) Of the above claim(s) 24,25,27,28 and 31-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 36-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Applicant's election with traverse of the process claims 36-52 in the reply filed on 11/28/06 is acknowledged. The traversal is on the ground(s) that there is no serious burden to examine composition claims along with claims directed to treating subterranean formations. This is not found persuasive because the compositions can be used in a wide variety of technologies. Cosmetics, food thickeners etc are all common uses for polygalactomannans. The search for the composition is much wider than the process. Yeh '825 (col 1 line 19, col 2 line 42) discloses such alternative uses. Additionally, references clearly meeting the composition will not necessarily anticipate the process claims. Applicant has not admitted on the record that the process using the composition is obvious from the composition. The issues involved in examining the composition and process are not the same.

The requirement is still deemed proper and is therefore made FINAL.

Claims 36-52 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gupta '832.

Gupta claims (#1,2) fracturing subterranean formations with an aqueous fluid of gelling agent (eg hydroxypropylguar) and crosslinking agent at a pH of 10-12. According to applicant (paragraph 6) this pH causes the insoluble residues to dissolve. Presumably, Gupta would inherently be devoid of insoluble residues also. Note that applicant does not consider crosslinkers to be insoluble gelling agent (paragraph 17 of spec). The amount of gelling agent is 10-100 pounds per thousand gallons of water (col 3 line 58). In regards to claim 45's addition of water in two separate steps, any number of water additions (as long as the total water is the same) would result in the same final

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product. Any mixing order or partial additions in the mixing sequence would have been prima facie obvious.

Claims 36-52 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Briscoe '145.

Briscoe teaches aqueous well treating fluids (col 1 line 8). Briscoe exemplifies liquid gel concentrates (table I) of hydroxypropylguar, water, NaOH and optionally inhibitor. Also table III has an example solely containing guar gum, NaOH and water. The pH of the mixture is 9-14 (col 10 line 27). This envelops applicant's preferred pH range of "about 10-13" (claim 34). According to applicant (paragraph 6) this pH causes the insoluble residues to dissolve. Presumably, Briscoe would inherently be devoid of insoluble residues also. The concentrate can be diluted at a 1:15 ratio with additional water (col 8 line 15). In order to reverse the inhibition, acid can be added to lower the pH to 5-9 (col 7 line 40). The pH adjustment is not always necessary (col 8 line 8).

Claims 36-52 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brannon '026.

Brannon teaches guar based gels (abstract) for use in subterranean formations (col 1 line 7). Brannon adds 20 lbs + 100 lbs of polymer and a pH adjuster such as ammoniumhydroxide to 1000 gallons of water (col 5 line 18-25). The pH is 10-11 (col 5 line 26). The pH and polymer concentration correspond to applicant's preferred amounts (eg claim 40) and therefore it is presumed that no gelling agent residue remains. Brannon teaches the amount of gelling agent is initially 0-100 pounds per thousand gallons (col 4 line 37) with a later addition of 10-300 pounds more (col 4 line

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51). Note that applicant (paragraph 4) considers "insoluble residues" to be proteins, cellulose and fibers – not the guar itself. Therefore, Brannon's late added unhydrated guar cannot be considered an "insoluble residue" based on applicant's definitions. Any proteins, cellulose, fiber contained within the late added unhydrated guar, will immediately dissolve upon hydration due to the pH.

Claims 36-52 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yeh '825.

Yeh produces polygalactomannan which transmits light (abstract). The light transmission is believed to be due to the lowered insolubles (col 1 line 45; col 2 line 67; col 6 line 34). Yeh's method involves treating a material such as hydroxypropylguar (col 5 line 42) with a solution of NaOH (col 4 line 26-41). Yeh then washes (col 4 line 42) and dries (col 5 line 3) the polygalactomannan. The resulting material will form stable aqueous solutions (col 6 line 45) and is useful in oil recovery (col 6 line 56). Yeh's "extra" washing and drying steps are not excluded by applicant's claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

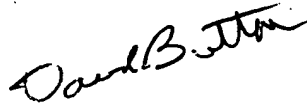
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID J. BUTTNER
David Buttner PRIMARY EXAMINER

2/13/07

A handwritten signature in black ink, appearing to read "David Buttner", is written over the printed name and title.